DOCUMENT RESUME

ED 117 574 CE 002 291

AUTHOR Fuentes, Gloscadio; and Others
TITLE Business Mathematics. Mathematics Curriculum Guide (Career Oriented).
INSTITUTION Louisiana State Dept. of Education, Baton Rouge.
REPORT NO Bull-1279; BT-102-679
PUB DATE May 76
NOTE 42p.; For related documents, see CE 002 282-290

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage
DESCRIPTORS Behavioral Objectives; *Business Subjects; Career Education; *Curriculum Guides; Learning Activities; Mathematics Curriculum; *Practical Mathematics; *Secondary Education
IDENTIFIERS Louisiana

ABSTRACT

The curriculum guide correlates concepts in business mathematics with career-oriented concepts and activities. The curriculum outline format gives the concepts to be taught, matched with related career-oriented performance objectives, concepts, and suggested instructional activities in facing page layouts. The outline is divided into the major sections of fundamental arithmetic, consumer mathematics, retailing, mathematics of finance and investment, taxes and insurance, and business graphs and records. (BJ)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED117574

MATHEMATICS CURRICULUM GUIDE
CAREER ORIENTED

BUSINESS MATHEMATICS

BULLETIN NO. 1270

Louisiana State Department of Education
Louis J. Watson, Superintendent
1974

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

[redacted]

[illegible]

[illegible]

[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

[illegible]

[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

[illegible]

[redacted]

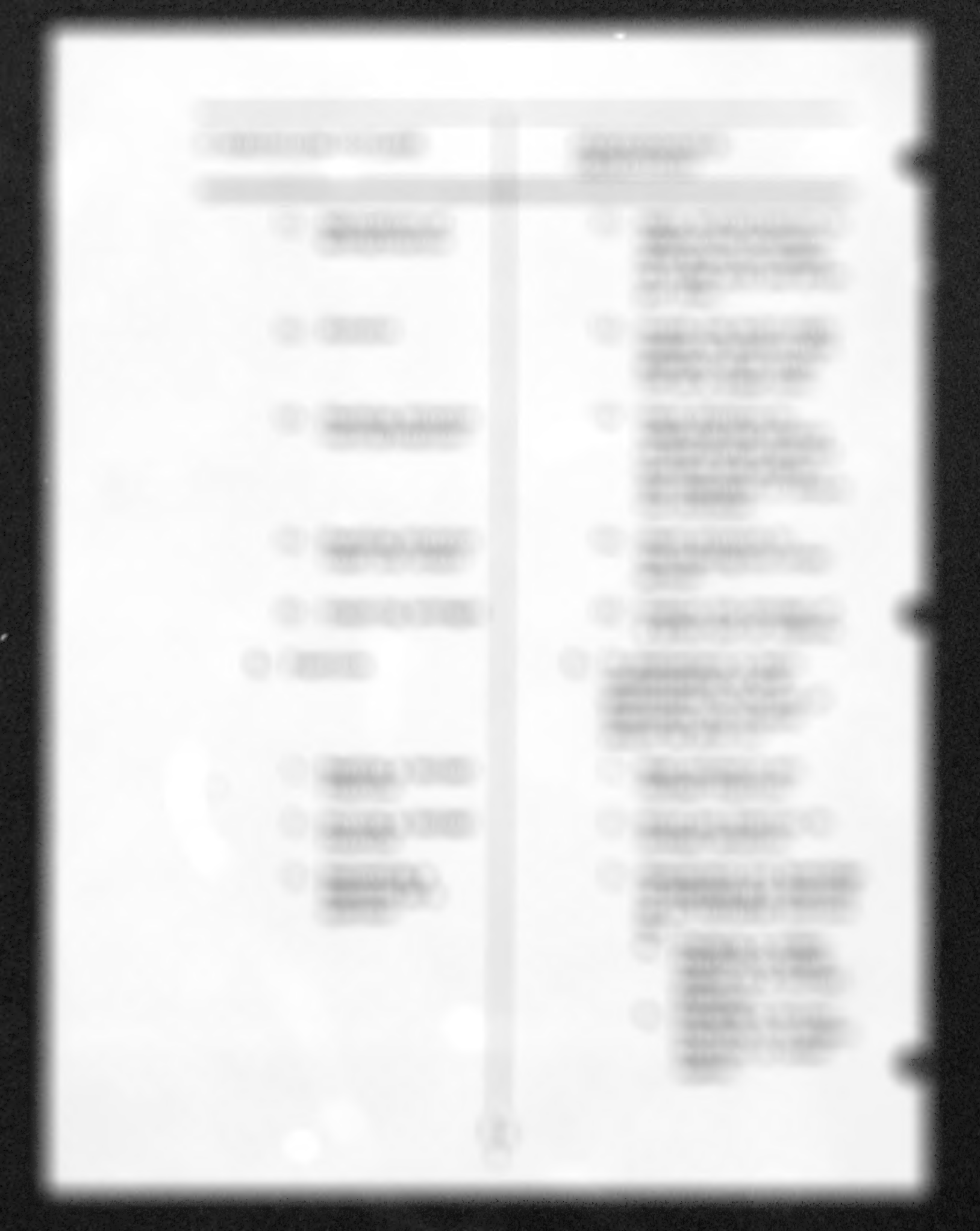
[illegible]

[illegible] [illegible]

[illegible] [illegible]

[illegible] [illegible]

[illegible] [illegible]



CURRICULUM OUTLINE	PERFORMANCE OBJECTIVES
4. Reducing a fraction	4. Reduce a given fraction to lowest terms.
5. Equivalent fractions	5. Change a given fraction to an equivalent fraction with a specified denominator.
6. Sum of mixed numbers (columns)	6. Compute the sum of a column of mixed numbers.
7. Sum of mixed numbers (row)	7. Compute the sum of a row of mixed numbers.
8. Difference of two mixed numbers	8. Subtract one mixed number from another.
9. Product of a mixed number and a whole number	9. Compute the product of a mixed number and a whole number.
10. Product of two mixed numbers	10. Compute the product of two mixed numbers.
11. Quotient of two mixed numbers	11. Divide one mixed number by another.
12. Aliquot parts	12. Name the most commonly used aliquot parts of $1 and determine what part of a dollar they are.
13. Multiples of aliquot parts	13. Apply multiples of aliquot parts of $1 to business transactions.
C. Percentage	C. To develop an understanding of and proficiency in the use of percentage, the student should be able to:

RELATED CAREER ORIENTED CONCEPTS AND OBJECTIVES	RELATED CAREER ORIENTED LEARNING ACTIVITIES
C. An electrical appliance retailer should be able to use percent to determine the selling price of an appliance.	C. An electrical appliance retailer bought a refrigerator for $175 and marked it to sell for a profit of 40% of the cost. He sold it for 15% less than the marked price. Determine the selling price and the profit.

CURRICULUM OUTLINE	PERFORMANCE OBJECTIVES
1. Expressing a percent as a common fraction	1. Express a given percent as a common fraction.
2. Expressing percent as a decimal	2. Express a given percent as a decimal fraction.
3. Expressing a fraction as a percent	3. Express any fraction (common or decimal) as a percent.
4. Expressing a whole number as a percent	4. Express any whole number as a percent.
5. Determining percentage	5. Determine percentage when given rate and base.
6. Determining percent (rate)	6. Determine what percent one number is of another.
7. Determining base	7. Determine base when rate and percentage are given. Find a number when a given percent of that is known.
8. Determining percentage when the rate is less than 1%.	8. Compute percentage when the rate is less than 1%.
9. Determining percentage when the rate is greater than 100%	9. Compute percentage when the rate is greater than 100%.
10. Computing the percent of increase	10. Determine one number from another and determine what percent of the estimated the difference is (percent of increase).
11. Computing the percent of decrease	11. Determine one number from another and determine what percent of the estimate the difference is (percent of decrease).

JOB-RELATED CAREER ORIENTED CONCEPTS AND OBJECTIVES	JOB-RELATED CAREER ORIENTED LEARNING ACTIVITIES
An insurance agent should be able to use percent to determine the amount a home owner could receive if his insured house is destroyed by fire.	An insurance agent sells fire insurance on a house for 80% of its assessed value. If the assessed value is $25,000, how much would the owner receive in the event the house was destroyed by fire?
Many of the jobs with the Federal government require that one pass the Federal Service Entrance Examination (FSEE). This test is administered periodically during a year, usually at a post office. A federal service testing director should be able to compute the percent of the applicants who actually took the test and the percent of testees who passed it.	Each year the Federal government hires many people who have made passing scores on the FSEE. There are usually more applicants than testees. Since it is a fairly difficult test, many who take it do not pass it. The director of testing keeps records of the number of applicants who take the test and the number of testees who pass it. During the year 1973, a total of 5,574 applied to take the test. Out of this number only 3,900 took the test and 1,170 passed. Compute the percent of applicants who took the test, and compute the percent of testees who passed.

[illegible]

[illegible]

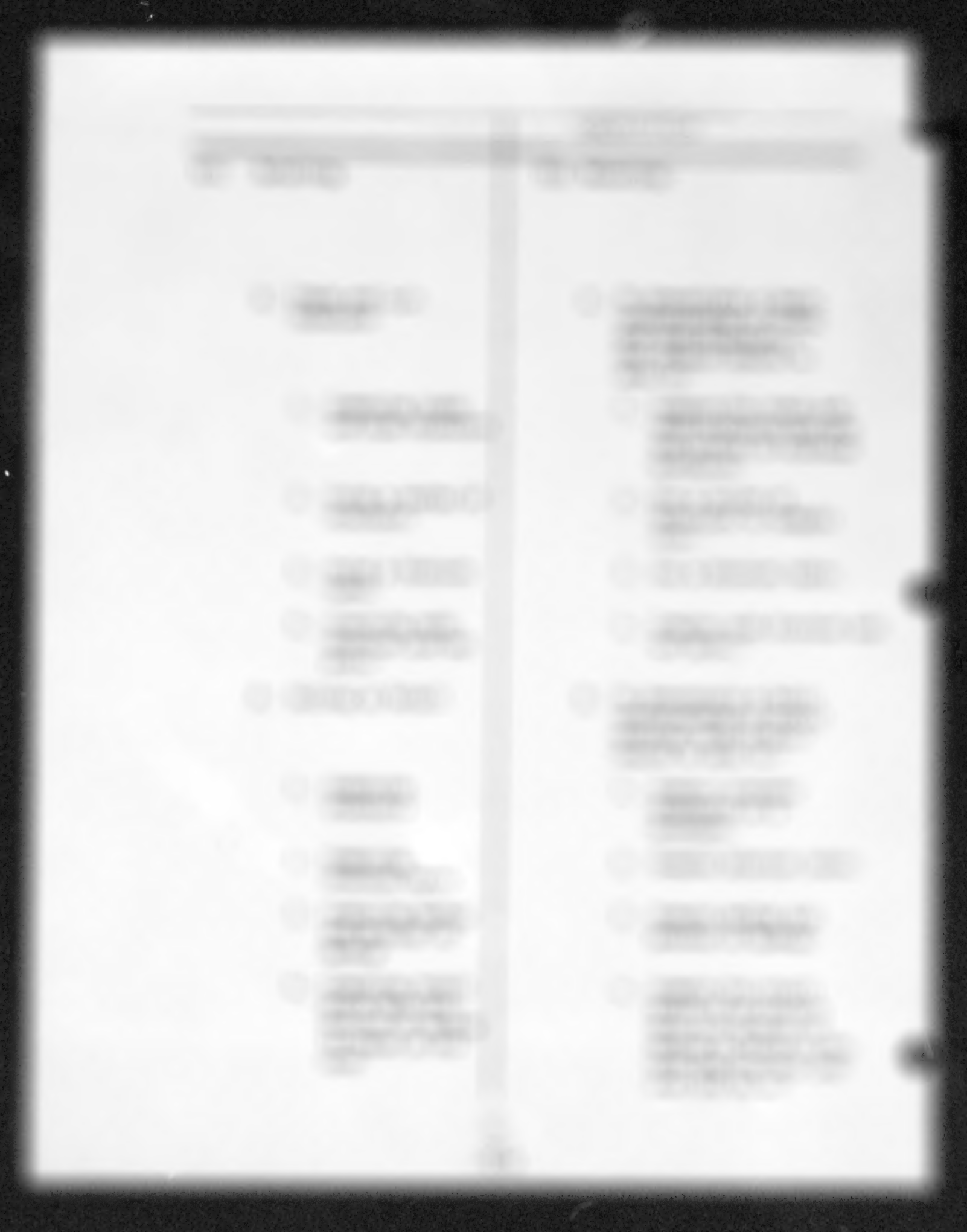
55. [illegible]

55. [illegible]

[illegible]

[illegible]

[illegible]



CURRICULUM OUTLINE	PERFORMANCE OBJECTIVES
5. Computing the retail price when the percent of markup is based on retail	5. Compute the retail price of an article when the percent of markup is based on the retail price and the rate and cost are known.
6. Computing cost when percent of markup is based on selling price	6. Compute the cost of an article when the percent of markup is based on the retail price and the rate and selling price are known.

RELATED CAREER ORIENTED CONCEPTS AND OBJECTIVES	RELATED CAREER ORIENTED LEARNING ACTIVITIES

CURRICULUM OUTLINE	PERFORMANCE OBJECTIVES
IV. Mathematics of Finance and Investment	IV. Mathematics of Finance and Investment
A. Interest	A. To demonstrate a basic understanding of interest, the student should be able to:
1. Computing exact interest	1. Compute exact interest given time and amount.
2. Computing banker's interest	2. Compute banker's interest given time and amount.
3. Using a time table	3. Determine the time lapse between 2 dates by use of a time table or by mental computation.
4. Computing interest using the interest table	4. Compute interest by the use of an interest table.
5. Compounding interest	5. Compound interest annually and quarterly.
6. Using compound interest table	6. Use compound interest tables.
7. Computing future value of deposited money on a projected date	7. Compute the future value of deposited money by use of the compound interest tables.
B. Stocks and bonds	B. To demonstrate a basic understanding of stocks and bonds, the student should be able to:

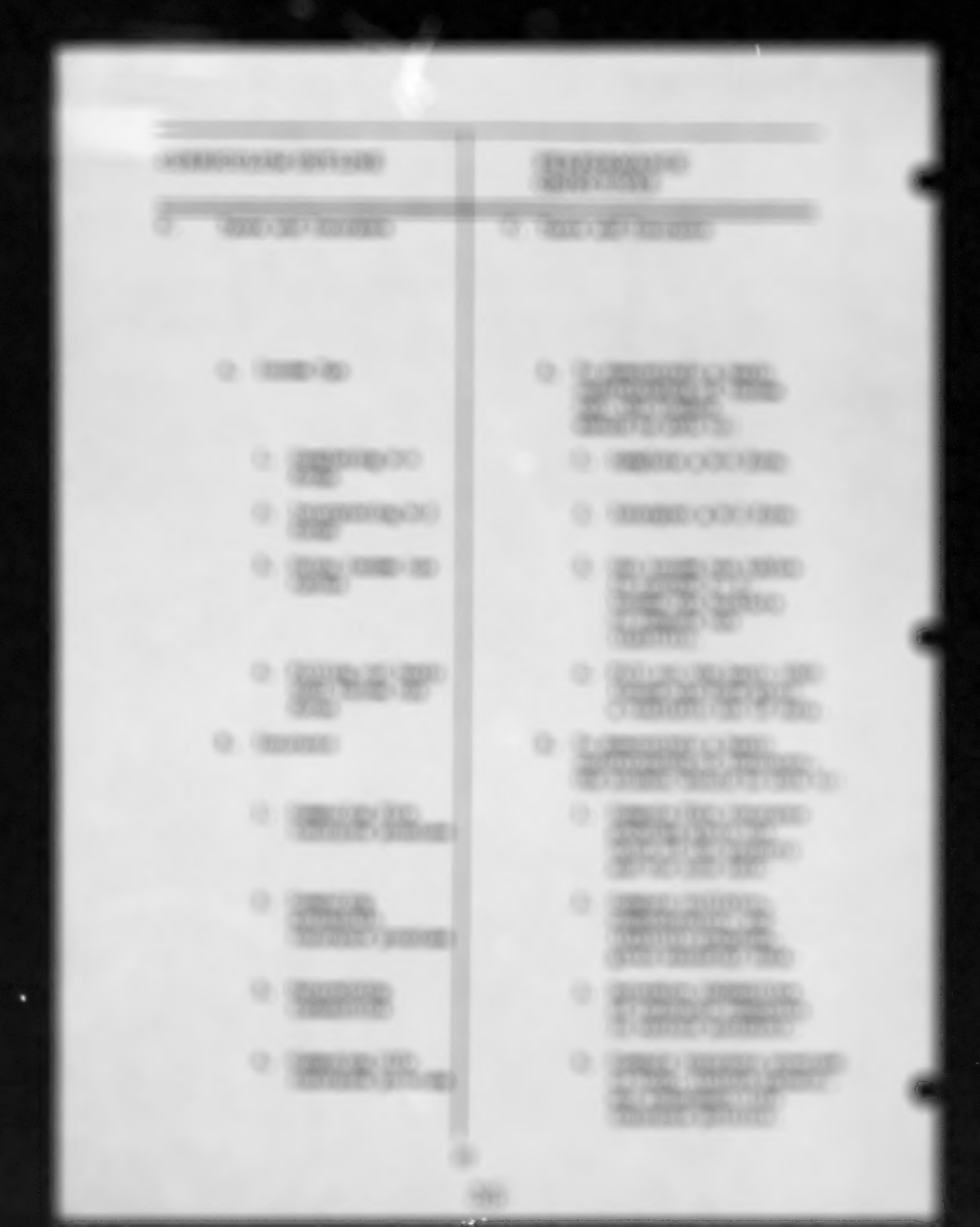
RELATED CAREER ORIENTED CONCEPTS AND OBJECTIVES	RELATED CAREER ORIENTED LEARNING ACTIVITIES
24. Career Concept: Individual spends any change as individuals change throughout life. Performance Objectives:	
a. A consumer specialist should be able to compute interest to determine the most economical loan.	a. A consumer specialist buys a "Baby Sleep" system at $1,498 for which he must pay cash. If he waits 30 days to make payment, there is a penalty charge of 3% of the invoice total. Also, he does not have the cash, should he pay immediately with money that was to borrowed from the bank for 30 days at an interest rate of 8% or should he wait the 30 days and pay the penalty charge?
b. A credit banker should be able to compute commissions on credits and loans he sells.	b. A credit banker sells $8 shares of stock for a customer at 17 1/8 and charges a fee of $3.00 plus 3% on the cost of the stock. Determine the banker's commission.

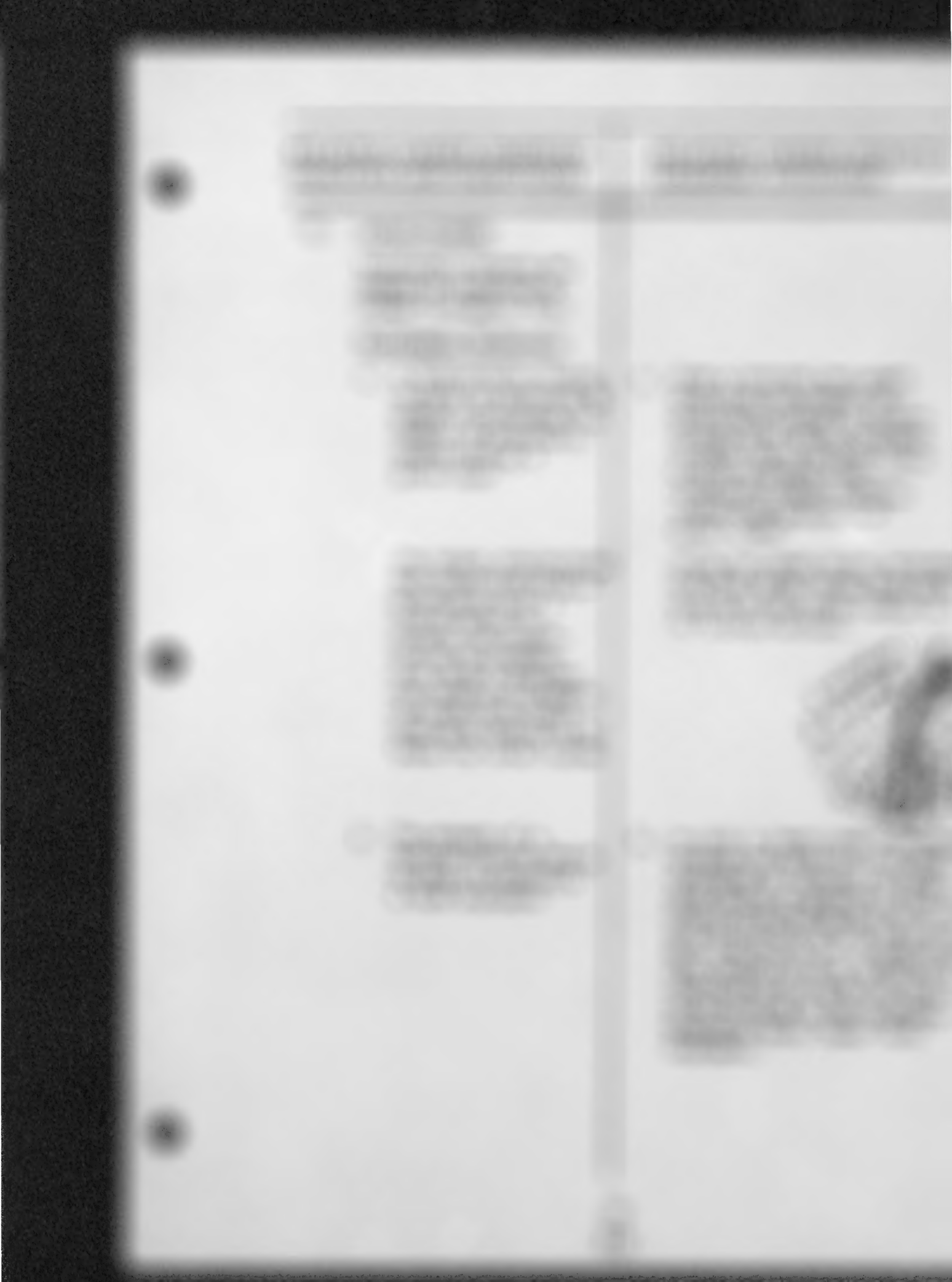
[illegible]

[illegible]	[illegible]
5. [illegible]	5. [illegible]
6. [illegible]	6. [illegible]
7. [illegible]	7. [illegible]
8. [illegible]	8. [illegible]
9. [illegible]	9. [illegible]
1. [illegible]	1. [illegible]
2. [illegible]	2. [illegible]
3. [illegible]	3. [illegible]
4. [illegible]	4. [illegible]
5. [illegible]	5. [illegible]
6. [illegible]	6. [illegible]

[illegible]

[illegible]





CURRICULUM OUTLINE	PERFORMANCE OBJECTIVES

RELATED CAREER ORIENTED CONCEPTS AND OBJECTIVES	RELATED CAREER ORIENTED LEARNING ACTIVITIES
A businessman should be able to prepare a balance sheet to determine the net worth of his business.	Using the form below prepare from the following facts a balance sheet as of December 31, showing the capital of James Harris. Assets: Cash, $4,382.59; accounts receivable, $2,857.16; notes receivable, $875; inventory of merchandise, $15,200; furniture and fixtures, $3,425; delivery trucks, $5,200. Liabilities: accounts payable, $2,195.63; notes payable, $1,450.

JAMES HARRIS

Balance Sheet, December 31, 19__

Assets		Liabilities	
Cash	$	Accounts Payable	$
Accounts Receivable		Notes Payable	
Notes Receivable		Total Liabilities	
Inventory of Merchandise			
Furniture and Fixtures		James Harris, Capital	
Delivery Trucks			
Total Assets	_____	Total Liabilities and Capital	____

Net Worth = Assets - Liabilities.